

Remarks

Reconsideration of this Application is respectfully requested.

Claims 50, 60, 66, and 68 are sought to be amended. Claims 50-68 are now pending, with claims 50, 60, and 68 being the independent claim. No new matter has been added.

Based on the above amendment and following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Information Disclosure Statement

Applicants again respectfully request the Examiner to consider and acknowledge the information disclosure statement filed August 18, 2003.

Rejections under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 50-68 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants traverse these rejections. An exemplary description teaching these claim features is found at least in paragraphs [0024] and [0031]-[0035] of the originally filed specification.

These paragraphs describe the example in which "In Plane motion" is defined as X, Y, and Theta Z motion, where the X-Y plane is the plane of the paper on Fig 7. "Out of plane" motion is defined as Z, Theta X and Theta Y motion, where Z is perpendicular to the plane of the paper on Fig 7. A pre-alignment station and an exposure station are described with the end effector being used to transfer the reticle from the pre-alignment station to the exposure station. The pre-alignment station generates X, Y, and Theta Z data (in plane), which is needed at the exposure station. At each station, a direct vacuum to vacuum transfer from the station to the end effector requires compliance in Z, Theta X, and Theta Y(out of plane).

The flexures 410 a-c together form a rigid coupling between reticle plate 205 and mounting plate 210 in the X, Y, and Theta Z direction (in plane). The flexures 410 a-c do not couple the reticle plate 205 to the mounting plate 210 in the Z, theta X, and Theta

Y direction (out of plane), they only apply a light spring force in this direction. The motion of reticle plate 205 relative to mounting plate 210 is best described as a small Z direction motion between two positions.

In the "in" position, reticle plate 205 contacts mounting plate 210. In the "out" position the reticle plate 205 is displaced in the Z direction away from mounting plate 210. In the "in" position, the contact of reticle plate 205 with mounting plate 210 further couples reticle plate 205 to mounting plate 210 in the Z, Theta X, and Theta Y (out of plane) directions. The six degrees of freedom coupling between reticle plate 205 and mounting plate 210 can be locked using vacuum lock 610.

In the "out" position, the reticle contacts the pre-alignment station or the exposure station, which applies a force in the Z direction onto reticle plate 205 through the reticle. This force overcomes the light spring force of flexures 410 a-c and displaces reticle plate 205 away from the mounting plate 210 to the "out" position. Without contact between reticle plate 205 and mounting plate 210, the flexures 410a-c allow reticle plate 205 and the reticle to align to the pre-alignment station or the exposure station in the Z, Theta X, and Theta Y direction (out of plane) while maintaining the alignment in X, Y, and theta Z (in plane).

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw these rejections.

Rejections under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 50-68 under 35 U.S.C. § 112, second paragraph. The Applicants traverse these rejections.

In regards to claims 50-59, although the Applicants disagree with the Examiner's rejection, Applicants have amended the claims as shown above to expedite prosecution. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections.

In regards to claims 60-68, although the Applicants disagree with the Examiner's rejection, Applicants have amended the claims as shown above to expedite prosecution. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections.

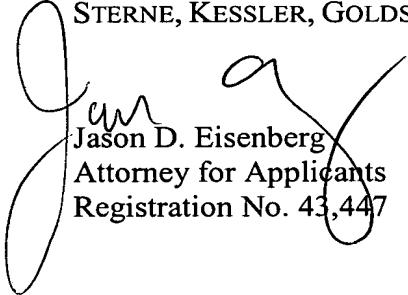
Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.


Jason D. Eisenberg
Attorney for Applicants
Registration No. 43,447

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600